REMARKS

I. STATUS OF THE CLAIMS

Claims 1 – 17 and 25 – 30 are currently pending. Claims 18 – 24 and 31 – 32 are cancelled. Although not conceding the merit of the Office's pending rejections, Applicants have amended claims 1, 25, and 30 to recite *heat-drawn* consolidated nonwoven webs in order to facilitate the prosecution of this application. Support for this amendment can be found, for example, at page 14, lines 24 – 27, of the original specification. No new matter has been added.

II. PRIOR ART REJECTIONS

The Office has rejected claims 1 – 6, 9 – 11, 13 – 17, and 25 – 30 under 35 U.S.C. § 102(b) as being anticipated by, or alternatively, under U.S.C. § 103(a) as being obvious in view of, US 5,336,545 (Morman). In particular, the Office reads Morman as teaching a laminate constructed of a necked fabric bonded to an elastic sheet. Although acknowledging that heat-drawn consolidation and necking (i.e., cold-drawn consolidation) are two different process, the Office nevertheless argues that both processes have substantially the same steps and, since the materials described by Morman are similar to those of the claimed invention, both of these processes would result in substantially the same product. The Office also considers that claims 1 and 25 include a processing limitation in a product claim, and thus patentability resides in the product itself – not in the process of making the product.

In addition, the Office has rejected claims 1 – 6, 9 – 11, 13 – 17, and 25 – 30 under 35 U.S.C. § 103(a) as being obvious over Morman in view of US Re 35,206 (Hassenboehler) and has further rejected claims 7, 8, and 12 under 35 U.S.C. § 103(a) as being obvious over Morman in view of US 5,789,065 (Haffner), or alternatively over Morman in view of Hassenboehler and further in view of Haffner. The Office acknowledges that Morman does not disclose the "processing limitation" of laterally consolidating the fabric layers or setting the layers in a traversely consolidated state before bonding to the film. However, with respect to combination of Morman and Hassenboehler, the Office asserts that in view of the improved elasticity taught by Hassenboehler, it would have been obvious to transversely consolidate the web of Morman. With respect to the combination of Morman and Haffner, the Office asserts that it would have been obvious to use a metallocene-catalyzed ethylene film in the composite of Morman, since one skilled in the art would know to select a known material on the basis of its suitability for the intended use.

A. SUMMARY OF CLAIMED INVENTION:

The presently claimed invention is directed to a tear resistant laminate having an elastic polymeric film disposed between, and bonded to, two nonwoven webs of *heat-drawn* consolidated, non-elastic thermoplastic fibers. Heat-drawn consolidation of a nonwoven web involves subjecting a thermoplastic nonwoven web to primary drawing under an elevated temperature. A heat-drawn consolidated nonwoven web has improved physical properties, especially in the traverse direction (i.e., the cross machine direction) such as an increased elongation-at-break with a minimum reduction in the force-to-break

strength (see e.g., Table II and Table III of the specification). In addition, heat-drawn consolidation permanently changes the dimensions of the width of the web (i.e., the web maintains its narrower width without the application of a tensioning force). Since a heat-drawn nonwoven becomes extensible via the consolidation process, it does not need to be kept under tension while being bonded to an elastic.

B. PRIOR ART REFERENCES:

1. US 5,336,545 (Morman)

Morman discloses a "necking" process, i.e., cold-drawn consolidation, in which a nonwoven fabric is narrowed in at least one dimension by applying a tensioning force to the fabric at room temperature. While this tensioning force is applied to the necked material, the material is bonded to an elastic to form a laminate. The reduction in width of the necked nonwoven is *reversible and temporary* and, thus, the degree of stretch in the neck bonded laminates is determined by the amount of tension (necking) that the nonwoven can undergo before breaking.

Morman also teaches that the tensioning force is applied to the necked nonwoven to facilitate the bonding of a pressure sensitive elastomeric adhesive sheet to the nonwoven. That is, the necked nonwoven and pressure sensitive elastomeric layer are wound together on a wind-up roll so that the tensioning force from the consolidated nonwoven activates the pressure sensitive elastomeric sheet and bonds the sheet to the nonwoven.

2. US Re 35,206 (Hassenboehler)

Hassenboehler teaches a consolidation process applied to a nonwoven fabric. In particular, the non-woven web is drawn while being subjected to high temperatures. According to Hassenboehler, the heat reorients the webbing's fibers, thus allowing the webbing's width to narrow as it is being drawn.

3. US 5,789,065 (Haffner)

Haffner teaches a process of first preparing laminate having an elastic layer and a non-woven layer, and then necking the laminate while applying heat to soften the elastic layer, thereby causing the elastic to loose its pre-necked memory.

C. ARGUMENTS

1. Morman does not teach all of the elements of claims 1 – 6, 9 – 11, 13 – 17, and 25 – 30.

Morman fails to teach a nonwoven web having *heat-drawn* consolidated fibers. A claim is anticipated by a reference only if the reference teaches each and every element of the claim. MPEP 2131. As described in more detail below, Morman does not teach, or even suggest, a heat-drawn consolidated web or its equivalent, and thus neither anticipates nor renders obvious the relevant claims as currently amended.

As previously indicated, the Office acknowledges that heat-drawn consolidation and cold-drawn necking are two different process, but argues that both processes result in substantially the same product. (*See* p. 4 of the Office Action, "... the final product [of Morman] would be substantially similar to the claimed product even though a different

process makes it"). However, it is well known in the art that cold-drawn consolidation *temporarily and reversibly* changes the width of a nonwoven fabric, whereas heat-drawn consolidation *permanently* changes the nonwoven fabric's width. This difference is important, particularly to the present invention, because a stretchable laminate can be formed from a heat-drawn consolidated nonwoven without applying a significant tensioning force to it during the bonding process. In contrast, if a tensioning force were removed from a cold-drawn consolidated nonwoven prior to bonding, it would return to its original width thereby reducing the laminate's stretchability.

Physical evidence of the differences between heat-drawn consolidated nonwovens and cold-drawn consolidated nonwovens has also been presented in the Rule 1.132 Declaration of Stephen Bruce. For example, microscopic images of bonding points in Figure 2 (which have undergone heat-drawn consolidation) are substantially in-tact whereas similar bonding point in Figure 3 (which have undergone cold-drawn consolidation) are substantially destroyed. Thus, these images rebut the Office's conclusion that cold-drawn and heat-drawn nonwovens are similar by definitively showing that heat-drawn consolidated nonwovens maintain bonding point integrity while cold-drawn consolidated nonwovens do not.

One skilled in the art would readily recognize that compromised bond points adversely affect the tensile strength of the material. Since tensile strength (i.e., force-to-break) of the web is an element of the claim, cold-drawn consolidated and heat-drawn consolidated materials are materially different from each other.

The Office also argues that since Morman teaches applying heat to the cold-drawn nonwoven during a subsequent bonding process, all of the steps of heat consolidation are taught by Morman. However, merely providing heat to a cold-drawn consolidated material at some point subsequent to the consolidation process does not render a material heat-drawn consolidated. The Office does not, and arguably cannot, offer any evidence that applying heat to a cold-drawn consolidated nonwoven can somehow re-establish the integrity of bonding points after they have been destroyed.

Since evidence has been submitting that rebuts the Office conclusion of similarity between heat-drawn nonwovens and cold-drawn nonwovens, Applicants assert that Morman does not teach or suggest each and every element of the claimed invention. Therefore, the Office's anticipation and obviousness rejections over Morman are respectfully traversed.

2. The proposed modification of Morman would change its principle of operation.

There is no motivation to modify Morman as proposed by the Office, i.e., using a heat-drawn consolidated nonwoven in lieu of a cold-drawn consolidated nonwoven, because such a modification would change the reference's principle of operation. According to MPEP 2143.01, a proposed modification cannot change the principle of operation of a reference. Here, the Office has proposed a modification to the method of Morman that would diminish the method's ability to utilize a strong tensioning force in bonding the consolidated nonwoven to an elastic.

The method of producing an elastic laminate taught by Morman involves the application of a tensioning force to neck a nonwoven material to a desired width and maintaining this tensioning force on the material to bond it to a pressure sensitive elastomeric adhesive sheet. (*See* Morman, col. 5, lines 40 – 47.) More particularly, the consolidated nonwoven and pressure sensitive elastomeric layer are wound together on a wind-up roll so that the tensioning force from the consolidated nonwoven activates the pressure sensitive elastomeric sheet and bonds the sheet to the nonwoven. (See Morman, claim 13.) The tensioning force is, therefore, utilized for two different purposes simultaneously: (1) cold-drawn consolidation of the nonwoven material; and (2) tensioning the consolidated nonwoven while it is being bonded to the elastic.

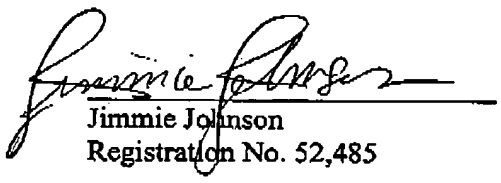
However, the Office's proposed modification to Morman (i.e., use of a heat-drawn consolidation of the nonwoven) would effectively change this principle of operation. That is, if a substantial tensioning force of the nature described in Morman were applied to a nonwoven undergoing heat-drawn consolidation, the tensioning force would adversely affect the physical strength of the nonwoven material. The Office's proposed modification would, therefore, require a substantial reduction in the tensioning force applied to the nonwoven as it is being consolidated. However, if only a relatively weak tensioning force was applied to the consolidated nonwoven, the tensioning force may not be adequate to activate the pressure sensitive elastomeric layer. Thus, one skilled in the art would not be motivated to modify Morman as proposed by the Office because such a modification would change the Morman's principle of operation.

For at least this reason, the Office's rejection based on Morman in view of Hassenboehler and Morman in view Hassenboehler and further in view of Haffner is respectfully traversed.

III. CONCLUSION

In view of the proposed claim amendments and the arguments presented above, the present application is believed to be in condition for allowance and an early notice thereof is solicited. The Office is invited to contact the undersigned counsel in order to further the prosecution of this application in any way.

Respectfully submitted,



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